



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/789,633      | 02/27/2004  | Kevin L. Bokelman    | 200312941           | 1193             |

22879 7590 05/03/2006

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

|          |
|----------|
| EXAMINER |
|----------|

JOERGER, KAITLIN S

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

3653

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/789,633

Applicant(s)

BOKELMAN ET AL.

Examiner

Kaitlin S. Joerger

Art Unit

3653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/27/04</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The independent claims 1, 6, and 18 all claim that the flag remains in one angular position for a portion of time while the medium is moving and in contact with the flag. This feature is unclear to the examiner as the figures that show the travel path of the sheet beneath the sensor clearly show that the flag rotates to different angular positions.

Further none of the claims claim sufficient structure for the examiner to determine the metes and bounds of the claim. The independent claims claim a flag that performs a certain function, but there is insufficient structure in the claims to allow that function to be performed. The structure is also not further clarified by the dependent claims; therefore the examiner is unclear as to how the function of the flag is performed.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 3653

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-18 and 21-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Carter et al. (6,926,272).

Carter et al. teaches a sensor, 70, a flag, 20, pivotally supported proximate to a media path, 110 and 150, through which media is moved, wherein the flag pivots as the media is moved through the media path such that the flag interacts with the sensor to cause the sensor to alternate between two states to produce position signals representing at least four distinct positions of the media along the path, the flag is configured to remain in substantially one angular position for a portion of time while the medium is moving and in contact with the flag, see figures 4-7 and column 3, line 59+ through column 4.

The sensor comprises an optical sensor, see column 3, lines 48+, and the flag includes one window that is pivoted relative to the optical sensor, see figures 10 and 11. The flag pivots less than 360 degrees. The flag pivots about an axis, 21, and it extends nonsymmetrically from the axis, see figure 3.

The further teaches a first media transfer member, 480, configured to contact a medium and to move the medium along the path and a second media transfer member, 460, configured to move the media along the path to the first transfer member. The second media transfer member further serves as a media interaction device for the transfer of image data in at least one direction between the media and the interaction device and wherein the flag extends into the media path between the input, where 480 serves as an input mechanism, and the interaction mechanism, where 460 is the interaction mechanism, see figure 4. The device further includes a controller,

Art Unit: 3653

95, that communicates with the sensor and an actuator in communication with the controller, wherein the flag is biased toward a first position when not in engagement with the medium, wherein the sensor produces a first position signal in response to the flag being in the first position and wherein the controller generates first control signals based upon the first position signal, see column 3, lines 59+. The second media transfer member, 460, in a medium driving state in response to the first control member, see column 4, lines 1+. The flag is pivoted by the media moving along the path from the first position to a second position, wherein the sensor is configured to produce a second position signal in response to the flag being in the second position and wherein the controller is configured to generate second control signals based upon the second position signal, see column 4. The second transfer member moves to a non-driving state in response to the second control signals, see column 4, lines 14+. The flag is configured to be pivoted to a third position by the medium moving along the path, wherein the sensor is configured to produce a third position signal in response to the flag being in the third position and wherein the controller is configured to generate third control signals based upon the third position signal. The controller is configured to transmit the third control signals to the interaction mechanism and wherein the interaction mechanism actuates between an active state and an inactive state in response to the third control signals, see column 4, lines 35+. The flag pivots to a fourth position by the media moving along the path, and a sensor produces a fourth position signal and the controller generates a fourth control signal based upon the fourth position signal for a period of time that equals the time to transport the media past the flag sensor, see column 4, lines 35+. The device includes a jam indicator, which indicates a jam in response to control signals, see column 5, lines 62+. The device further includes a means for terminating

Art Unit: 3653

transmission of force to the media at at least one location along the media path in response to a second one of the four position signals, see column 4, lines 18+.

Carter et al. further teaches a method for interacting with a medium along a path, the method comprising: locating a flag in the path in a first position relative to a sensor that alternates between two states; producing a first position signal in response to the flag being in the first position; pivoting the flag from the first position to the second position in response to movement of the medium along the path; producing a second position signal in response to the flag being in the second position; pivoting the flag from the second position to a third position in response to movement of the media along the path; producing a third position signal in response to the flag being in the third position; pivoting the flag from the third position to a fourth position in response to movement of the media along the path; producing a fourth position signal in response to the flag being in the fourth position; and maintaining the flag in the fourth position until the media disengage the flag, see column 3, line 59+ through column 4. The method includes indicating a media jam in response to a signal, see column 5, lines 62+. The method includes interacting with the media to form an image upon the media.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Choho et al. in view of Carter et al.

Carter et al. teaches all of the features of the claimed invention except for an interaction mechanism that is configured to read data from the media and is a scanner. It is well known in the art to use sensors in combination with media scanners as taught by Choho et al. Choho et al., however, does not teach a sensor that produces four position signals representing four positions of the media along the path.

It would have been obvious to one of ordinary skill in the art to combine the four position signal device of Carter et al. with the document scanner of Choho et al. in order to more accurately determine the location and progress of the media along the paper path and determine how far along the scanning process that the sheet has traveled.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The additional references listed on the PTO-892 form are other examples of flag sensors among the prior art that sense the presence and position of a sheet traveling in a path.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

Art Unit: 3653

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksj  
  
28 April 2006

  
**EILEEN D. LILLIS**  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3600